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ABSTRACT

Teacher-developed materials for a basic computer literacy and utilization program for elementary students in grades 3-6 are included in this 4-part packet, which was originally prepared for use with or without the Apple IIe "traveling" microcomputers shared by 15 Rowland Unified School District elementary schools. Implementation procedures are suggested for teachers and principals, and sample project planning forms, schedules, and evaluation materials are provided. Materials for use before the computer arrives include an outline of activities and objectives (for the teacher); student pages introducing the computer and illustrating the keyboard and care of computers and disks; and a 19-page student folder with worksheets and illustrations on parts of a computer system, including the disk drive, monitor, printer, disk, and keyboard. Set-up and operating instructions include a packing list, safety and security recommendations, and environmental considerations. Activities suggested for use with the computer cover student orientation, how to use correlated basic task cards, and inservice teacher preparation. (LMM)

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TRAVELING APPLES

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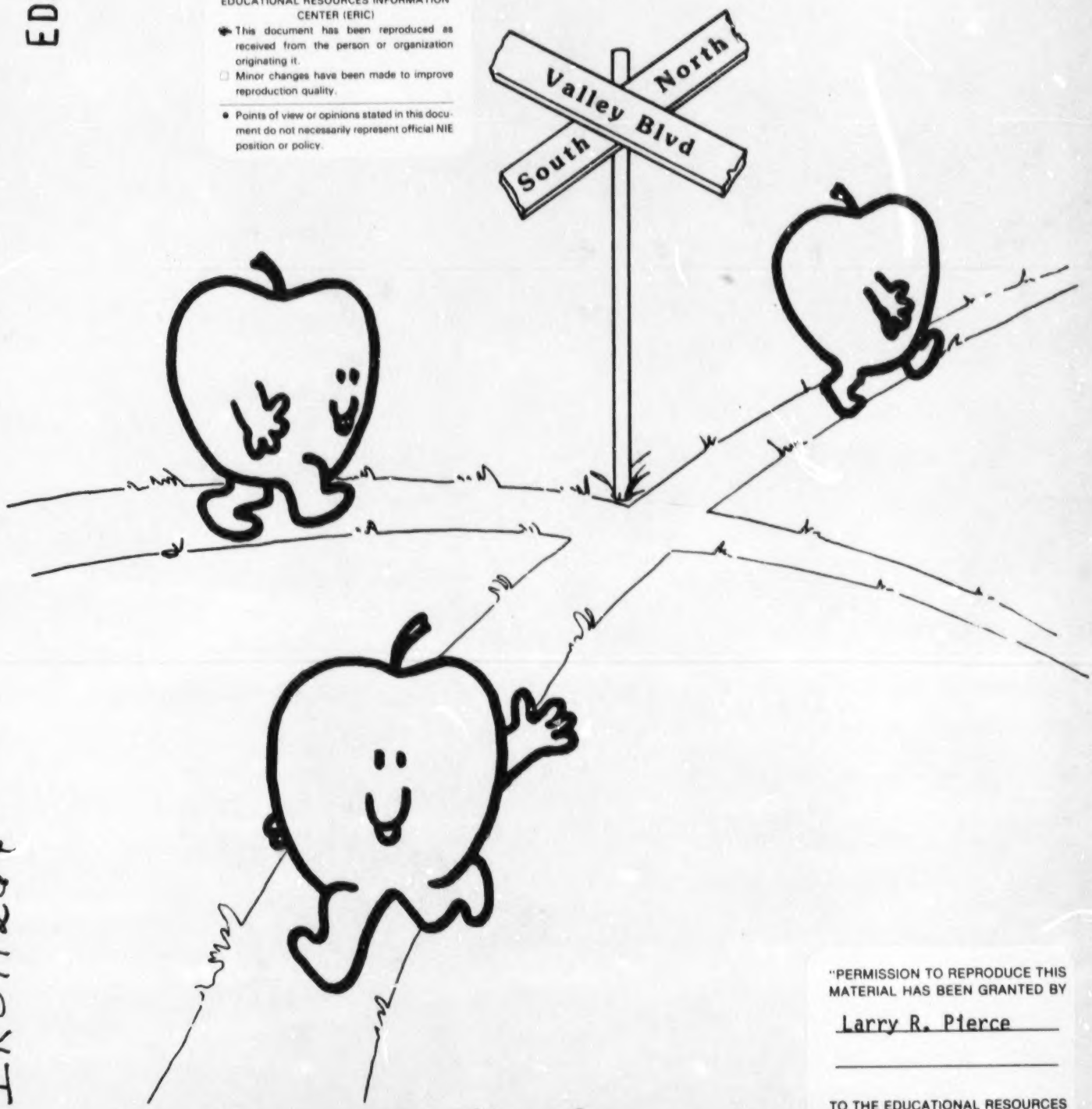

IR011264

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TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)"

OUTSTANDING PROGRAM DESCRIPTION FORM

Name of School, District or Agency ROWLAND UNIFIED SCHOOL DISTRICT Grade Levels K-6

Address 1830 Nogales Street Telephone (818) 965-2541

City Rowland Heights State CA Zip 91748

Name of Contact Person Larry Pierce ACSA Region XV

Name of Course, Program, Project or Policy Elementary Travelling Apple Computers

Date of Operation of Program or Project School Year 1983-84

In 300 words or less please describe your program specifically enough for others to follow. Please include your p.c
(1) primary purpose (how it benefits students)
(2) participants (grade levels of students, professional staff, community persons, etc)
(3) evaluation data (if available)

In July 1983, Rowland Unified School District purchased six Apple IIE computers for the use of students in the District's fifteen elementary schools. In order to give equal opportunities to all schools, a committee of teachers was formed to develop a basic computer literacy program and schedule for computer utilization in each school.

The committee, comprised of six elementary teachers with a special interest in computers, developed a package of learning activities teachers could use both with and without computers. A computer literacy framework developed weeks earlier for grades 7-12 was used as a guideline, and many commercially prepared materials were also incorporated into the package. The committee soon discovered a lack of commercially produced materials for primary grade levels, however, and set about developing their own.

The schedule allowed for each set of three computers, divided between schools on the north side of the District and those on the south side, to stay at each school for nineteen school days. Most schools developed programs utilizing teachers on early retirement to instruct small groups of students in basic computer literacy on a "pull out" basis. This instruction was augmented by classroom teachers with such large group activities as learning parts of the computer and arrangement and function of keys on the keyboard.

Through careful scheduling, these schools were able to arrange approximately 90 minutes of "hands-on" computer experience for all 3rd, 4th, 5th, and 6th graders in each school. As schools continue to purchase their own computers, the activities used with the Travelling Apple program will continue to be used and will form the basis of a more comprehensive program of computer utilization.

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NAME Larry K. Pierce DATE 1-19-84

Enclose supporting or descriptive materials and return to ACSA Public Confidence Task Force, Public Relations Departme 1517 L Street, Sacramento, CA 95814.

SECTION 1

IMPLEMENTATION

RECOMMENDATIONS FOR SAFETY AND SECURITY

1. Since the computers are fragile and expensive, it is crucial that they be moved only by adults at all times.

2. To prevent theft or damage, the computers should be stored in a secure alarmed room every night. Movement of the computer should be accomplished by using a school cart or locked cases, if available.

3. One electrical wall outlet will accomodate one or several computers with the use of a Power Bar (one is included with the Traveling Apples).

4. If multiple computers are being used in the same room, do not use any other electrical equipment (other than a fan, if needed) at the same time; this may exceed the electrical power load of the room and may damage the computers.

5. For proper care of computer and disks, please refer to the "Care of the Computer" and "Care of the Disk" sheets.

ENVIRONMENTAL CONSIDERATIONS

1. The computer and disks should be kept away from the chalkboard, the pencil sharpener and the sink. They are affected by dust, dirt and water.

2. The computer(s) should be positioned away from direct sunlight to avoid screen glare and eyestrain.

3. Extreme heat should be avoided. If the room temperature exceeds 90 degrees, it is recommended that a fan be used to circulate air in the classroom.

4. Because students may tend to crowd around the computer, the teacher may wish to section off an area a few feet to the sides and back of the computer as "off limits" to anyone except the operator(s).

SUGGESTIONS FOR SCHEDULING AND IMPLEMENTATION FOR PRINCIPALS AS THEY DEVELOP THE SCHOOL PLAN

PRINCIPAL NOTES: The following questions and statements are suggestions for principals and staff to use in designing and completing the attached implementation plan.

Who might use the computers?

1. Students of teachers who are interested (at any grade level)
2. Students at specific grade level(s)
3. Students of computer-literate teachers
4. Students in special programs
5. Lab situation - selected students

Where might the computers be placed?

1. Central location - students rotate
2. One or more classrooms - computers rotate
3. One classroom - classes rotate

When might the computers be used?

1. One hour a day for 9 or 10 days
2. One hour a day for 19 days
3. ½ day for 4 or 5 days
4. ½ day for 19 days
5. All day for 4 or 5 days
6. Other

SITE IMPLEMENTATION FOR TRAVELING APPLES

To the Principal: A completed plan should be submitted to the Elementary Division office two weeks prior to the arrival of the computers at your site.

1. Where will the computers be placed for instruction?_____

_____

2. In what secure area will the computers be housed after the instructional day?

_____

_____

3. How many teachers will use the computers in their classrooms for instructional purposes?_____

_____

4. Which student groups will use the computers (i.e. grade levels, GATE, RSP)?__

_____

_____

_____

5. Attach a day/time schedule for use of the computer.

6. How will the use of the computers tie in with other curriculum areas?

_____

_____

_____

7. Do you plan to use the computers after the instructional day for additional staff training? Explain.

_____

_____

_____

8. In addition to the instructional materials coming with the Traveling Apples, are there any other computer activities your school is doing or has done that you would like to share?

_____

_____

_____

_____

Plan Completed by _____ Date _____ School _____

- S A M P L E -

SITE IMPLEMENTATION FOR TRAVELING APPLES

To the Principal: A completed plan should be submitted to the Elementary Division office two weeks prior to the arrival of the computers at your site.

1. Where will the computers be placed for instruction? in five 5th and 6th grade classrooms

2. In what secure area will the computers be housed after the instructional day? in the locked A-V room (school is alarmed)

3. How many teachers will use the computers in their classrooms for instructional purposes? 5

4. Which student groups will use the computers (i.e. grade levels, GATE, RSP)? All 5th and 6th grade students

5. Attach a day/time schedule for use of the computer.

6. How will the use of the computers tie in with other curriculum areas? It will reinforce reading, spelling and language skills. It will provide opportunities to develop problem solving and logical thinking skills through the use of simple programming activities provided in the packet.

7. Do you plan to use the computers after the instructional day for additional staff training? Explain.

Yes, the computers will be available for teacher use for an hour after school each day.

8. In addition to the instructional materials coming with the Traveling Apples, are there any other computer activities your school is doing or has done that you would like to share?

Logo and Koala programs

Turtle Graphics

John Doe	10-10-83	Ronald Reagan Elementary
Plan Completed by	Date	School

COMPUTER SCHEDULE FOR RONALD REAGAN ELEMENTARY SCHOOL

	M T	W TH	F
A.M. Classes	TEACHER **A**	TEACHER **B**	Sample TEACHER **E**
P.M. Classes	TEACHER **C**	TEACHER **D**	

11

12 10

STAFF EVALUATION OF TRAVELING APPLE PROGRAM

This form should be filled out by each staff member who uses the Traveling Apple computer packet and submitted to the principal.

1. With what grade level or program did you use the computers? _____

2. Approximately how many hours did you spend:

   A. Using the activity packets _____

   B. Getting acquainted with the computer _____

   C. Using the computer(s) with your students _____

3. How much previous experience have you had with computers? _____

   _____

4. Please rate the following:

		Poor				Excellent
A.	Inservice	1	2	3	4	5
	Comments: _____					
B.	Set-up instructions	1	2	3	4	5
	Comments: _____					
C.	Activity Packet	1	2	3	4	5
	Comments: _____					
D.	Task card activities	1	2	3	4	5
	Comments: _____					

5. What suggestions for improvements or changes do you have?

SECTION 2

ACTIVITIES BEFORE THE COMPUTERS ARRIVE

ACTIVITIES FOR USE BEFORE COMPUTERS ARRIVE

This activity packet has been compiled for your use with students. By using the packet before your computers arrive, you may increase student understanding of the use of the machine.

The outline includes subject areas in sequential order. The activities under each Terminal Objective are listed in order of difficulty and may be utilized with a range of pupils.

The indicated student pages are found in the three accompanying booklets. You may use as many or as few sheets as you like. These can be used in appropriate curriculum areas at your grade level.

OUTLINE:

I. STARTING MATERIALS USED TO INITIATE THE COMPUTER UNIT

A. Bulletin Board Ideas

1. Computer Tutor pp. 5, 6

B. Student Folder

1. Packet

C. Certificates

1. Computer Tutor Jr. p. 45
2. Computer Tutor p. 46
3. Computer Calling p. 40

D. Computer Vocabulary

This is a list of terms the students will encounter in the activities which follow. Their definitions can be found in the glossaries of Computer Tutor, Computer Tutor, Jr., and Computer Calling.

BASIC
cassette
computer
data
disk
disk drive
hardware
input
keyboard
memory
microcomputer
monitor
output
process
program
programmer
software
SYNTAX ERROR

II. WHAT IS A COMPUTER?

Terminal Objective: The student will understand that a computer is a man-made tool used to receive, process, and store information.

Activities:

A. Discuss the introductory page entitled "What Is A Computer?" found on the attached pages.

B. Computer Tutor Jr. pp. 5, 11, 21, 23, 28, 29

C. Computer Tutor pp. 16, 17

D. Computer Calling pp. 23,25

III. WHAT A COMPUTER CAN AND CANNOT DO

Terminal Objective: The student will be able to identify at least three things a computer can and cannot do.

Activities:

A. Computer Tutor Jr. pp. 6, 7, 9, 12, 13, 14

B. Computer Tutor pp. 9, 10

IV. HISTORY OF COMPUTERS

Terminal Objective: The student will be exposed to the historical development of the computer.

Activities:

A. Computer Tutor Jr. pp. 12, 19, 20

B. Computer Tutor pp. 11-14

C. Computer Calling pp. 4-11, 14

V. COMPUTER HARDWARE

Terminal Objective: The student will be able to identify different components of computer hardware.

Activities:

A. Computer Tutor Jr. p. 16

B. Computer Tutor p. 19

C. Computer Calling pp. 17, 19, 26

D. Packet

VI. COMPUTER SOFTWARE

Terminal Objective: The student will be able to identify various types of software.

Activities:

A. Computer Tutor Jr. pp. 17, 18

B. Computer Tutor p. 18

C. Packet

VII. KEYBOARD PRACTICE

Terminal Objective: Students will use paper keyboards to learn the location of specific keys.

Activity:

Use Sample keyboards with and without symbols, found on the attached pages.

VIII. CAREERS IN COMPUTERS

Terminal Objective: The student will demonstrate an understanding of careers that involve computers.

Activities:

A. Computer Tutor Jr. p. 15

B. Computer Tutor pp. 44-45

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INTRODUCTION FOR STUDENTS

WHAT IS A COMPUTER?

WHEN EARLY MAN HAD JOBS TO DO, HE HAD TO DO THEM ALL BY HIMSELF. HE HAD NO MACHINES OR TOOLS TO HELP HIM. SINCE THAT TIME, MAN HAS INVENTED MANY TOOLS TO HELP HIM DO ALL TYPES OF JOBS.

INSTEAD OF CARRYING WATER FROM STREAMS OR WELLS WITH HIS HANDS, MAN MADE BOWLS AND BUCKETS TO CARRY WATER. LATER, HE INVENTED PUMPS. NOW WE HAVE PIPES AND FAUCETS TO BRING WATER TO US.

MAN INVENTED THE MICROSCOPE TO OBSERVE THINGS TOO SMALL TO SEE WITH THE UNAIDED EYE. NOW HE CAN SEE ORGANISMS THAT HE DID NOT KNOW EXISTED BEFORE THE MICROSCOPE WAS INVENTED.

MAN WANTED TO EXTEND THE USE OF HIS BRAIN, SO HE INVENTED A TOOL, THE COMPUTER.

JUST AS A MICROSCOPE CAN'T WORK WITHOUT A PERSON TO LOOK THROUGH IT, A COMPUTER CAN'T WORK WITHOUT A PERSON TO TELL IT WHAT TO DO. THIS PERSON IS CALLED A PROGRAMMER.

THE BEST MICROSCOPE CAN'T DO EVERYTHING OUR EYES CAN DO AND THE BEST COMPUTER CAN'T DO EVERYTHING OUR BRAINS CAN DO. A COMPUTER HAS NO EMOTION. IT CAN'T FEEL HAPPY OR SAD LIKE WE CAN.

OUR BRAIN CAN COMBINE IDEAS. IT CAN PUT TWO IDEAS TOGETHER AND TAKE THE BEST PARTS OF EACH ONE TO MAKE A BRAND NEW IDEA. A COMPUTER CAN'T DO THAT.

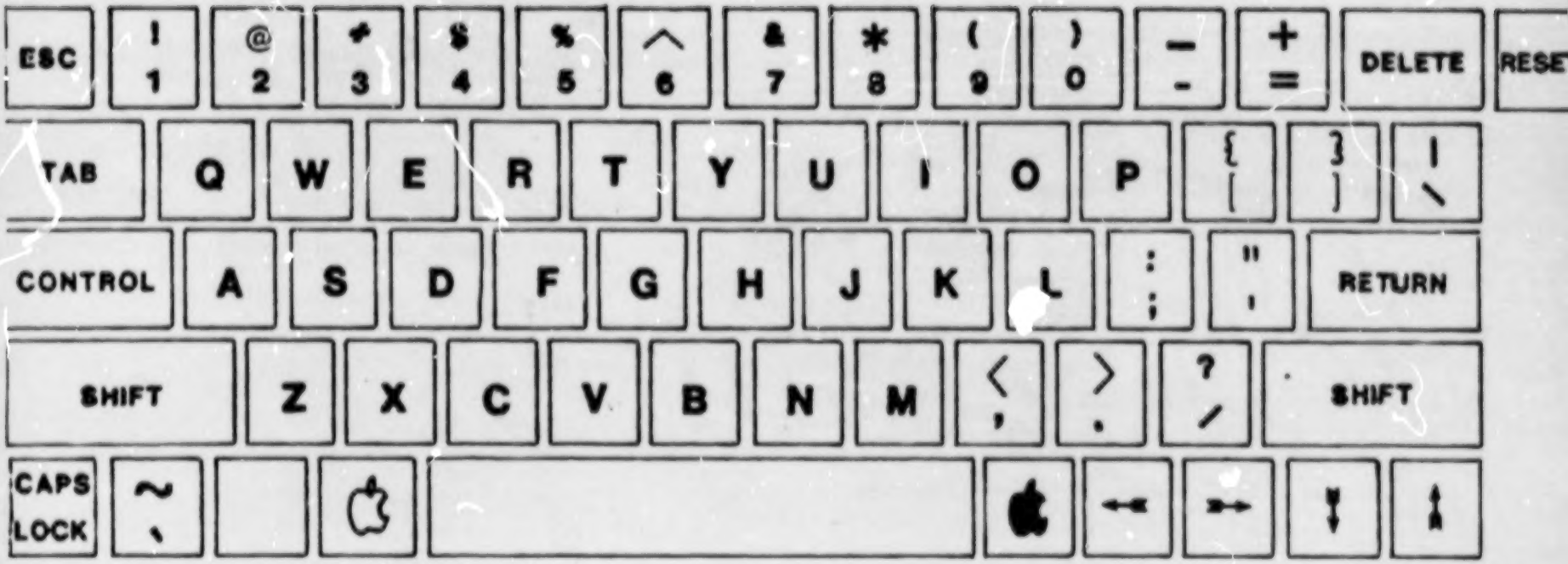
BUT . . . A COMPUTER CAN DO SOME OF OUR BRAIN'S SIMPLER TASKS. AND IT CAN DO SOME OF THEM FASTER THAN WE CAN!

A COMPUTER CAN REMEMBER MANY MORE THINGS THAN WE CAN WITH JUST OUR BRAINS, LIKE LONG LISTS OF NAMES OR NUMBERS. THIS INFORMATION IS KEPT IN THE MEMORY OF THE COMPUTER. PROGRAMMERS CALL THIS INFORMATION DATA.

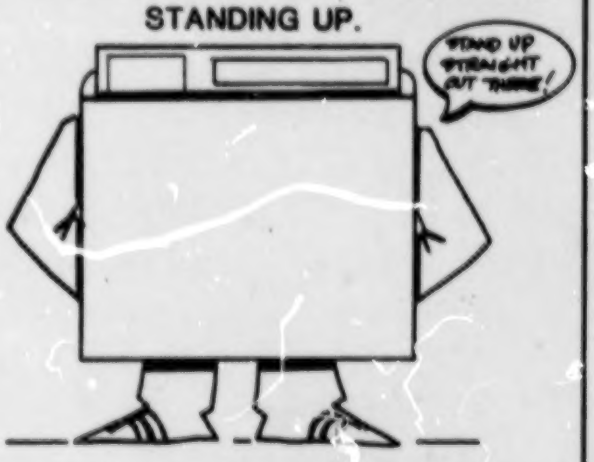
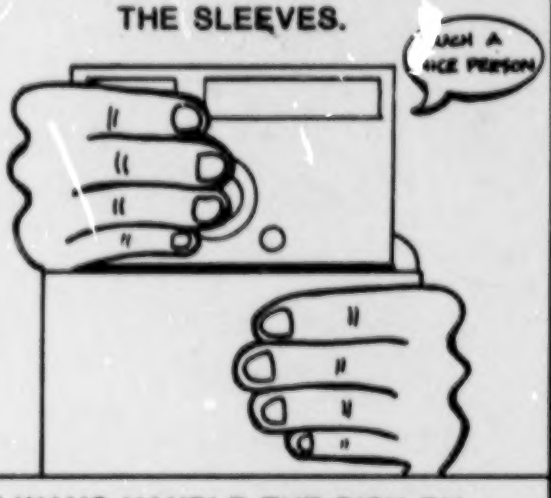
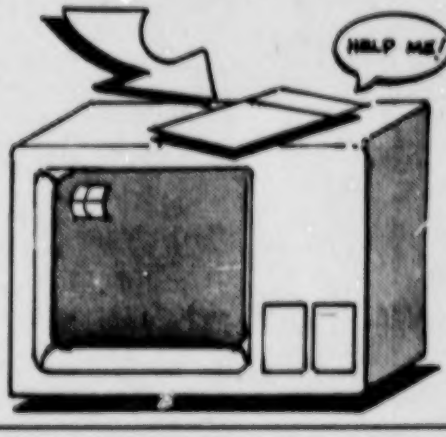
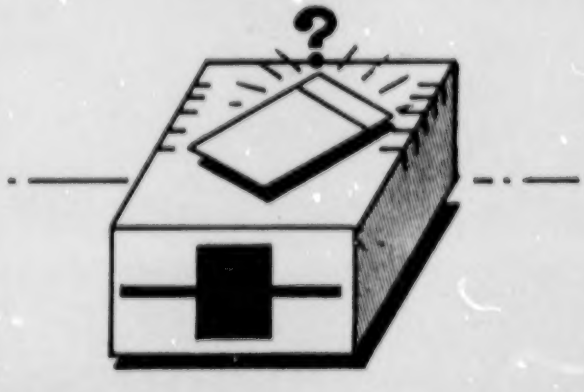
A COMPUTER CAN COMPARE DATA. IT CAN SEE IF ONE THING IS BIGGER, SMALLER, OR THE SAME AS ANOTHER. IT CAN PUT THINGS IN ORDER. IT CAN ALSO SORT MANY PIECES OF DATA AND PUT LIKE THINGS TOGETHER. A COMPUTER CAN LOOK IN ITS MEMORY TO FIND DATA THE PROGRAMMER WANTS, AND PRINT OUT THE DATA ON A VIDEO SCREEN OR A SHEET OF PAPER.

16

APPLE IIe KEYBOARD



CARE OF THE DISKS

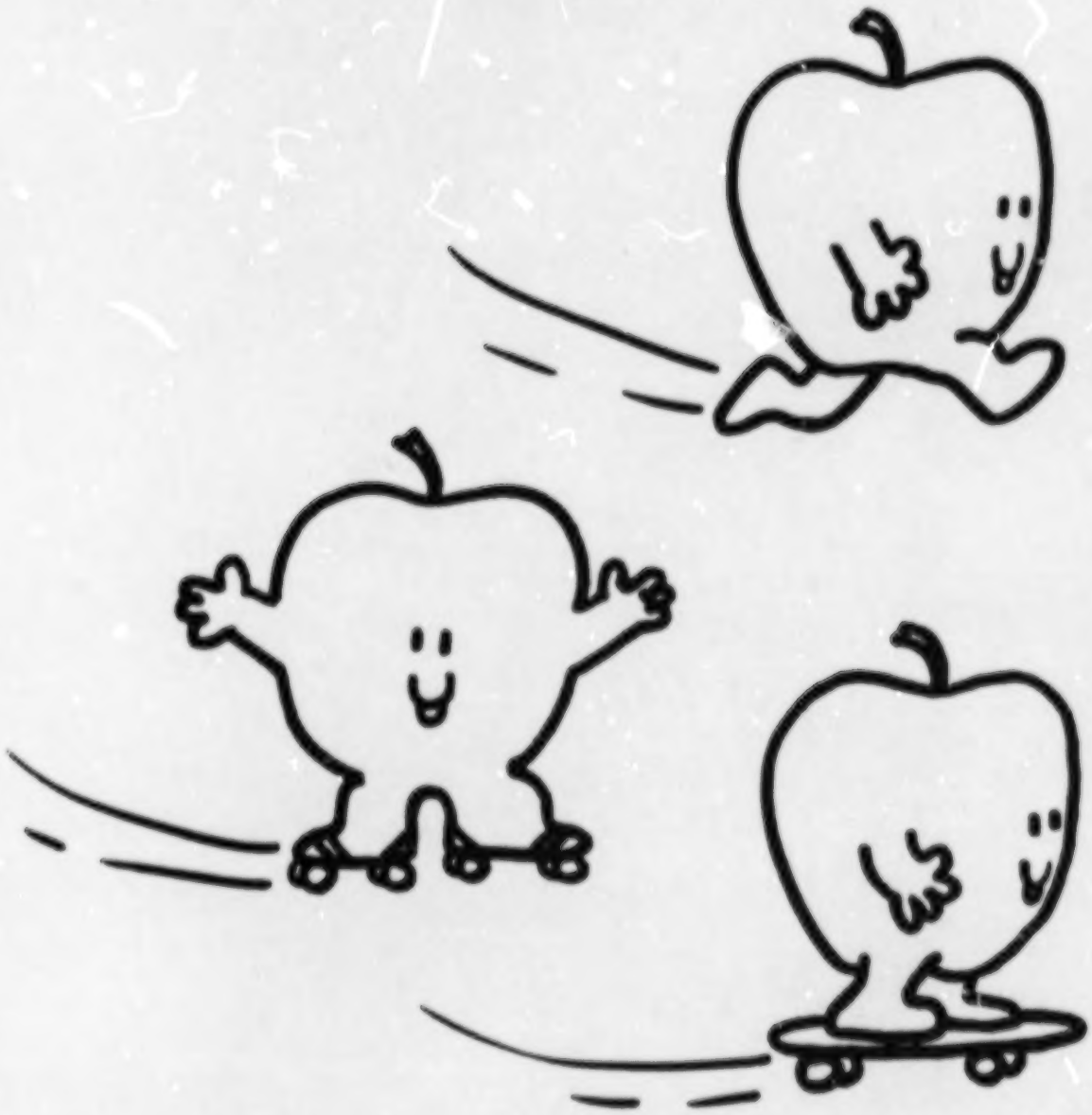
DO'S	DON'TS
ALWAYS STORE THE DISKS STANDING UP. 	DON'T PUT THE DISK ON TOP OF THE COMPUTER.
ALWAYS PUT THE DISK BACK IN THE SLEEVES. 	DON'T PUT THE DISK ON TOP OF THE MONITOR. 
ALWAYS HANDLE THE DISK BY THE LABEL.	DON'T PUT THE DISK ON TOP OF THE DISK DRIVE. 

CARE OF THE COMPUTER

DO'S	DON'TS
DO HAVE CLEAN HANDS.	DON'T TOUCH THE MONITOR SCREEN.
DO GET RID OF STATIC ELECTRICITY.	DON'T PUT FOOD OR DRINKS NEAR COMPUTER.
WATCH OUT FOR HAZARDS.	DON'T LEAVE A MESSY WORK AREA.

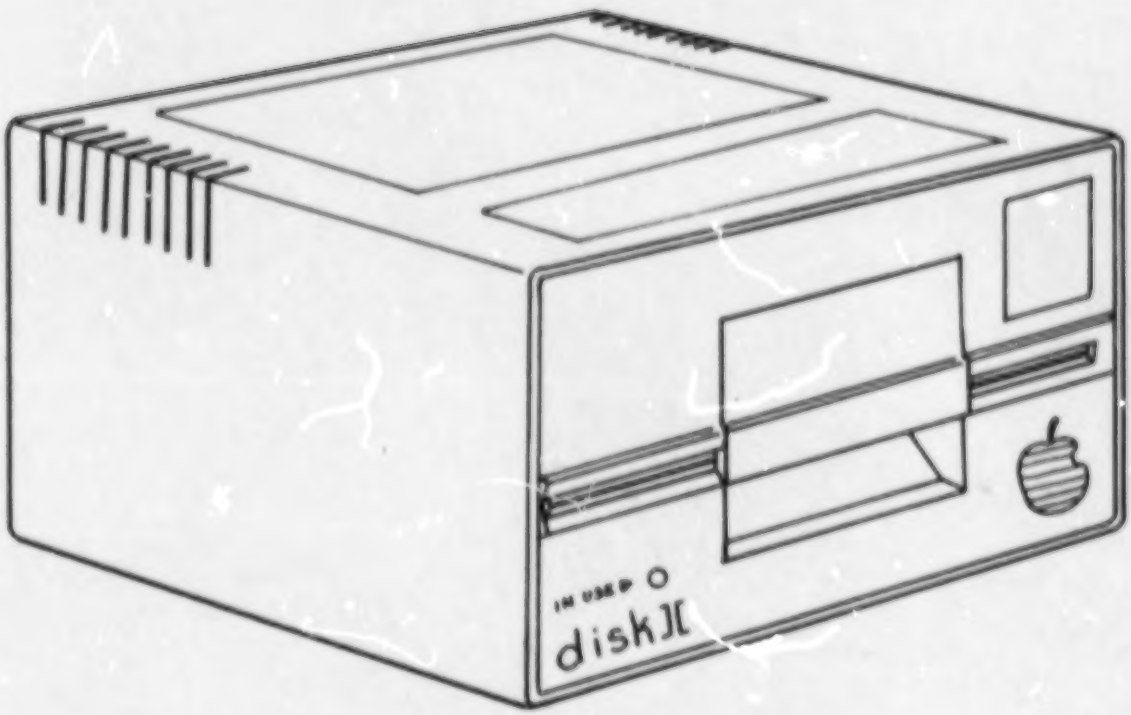
20

MY TRAVELING APPLES FOLDER



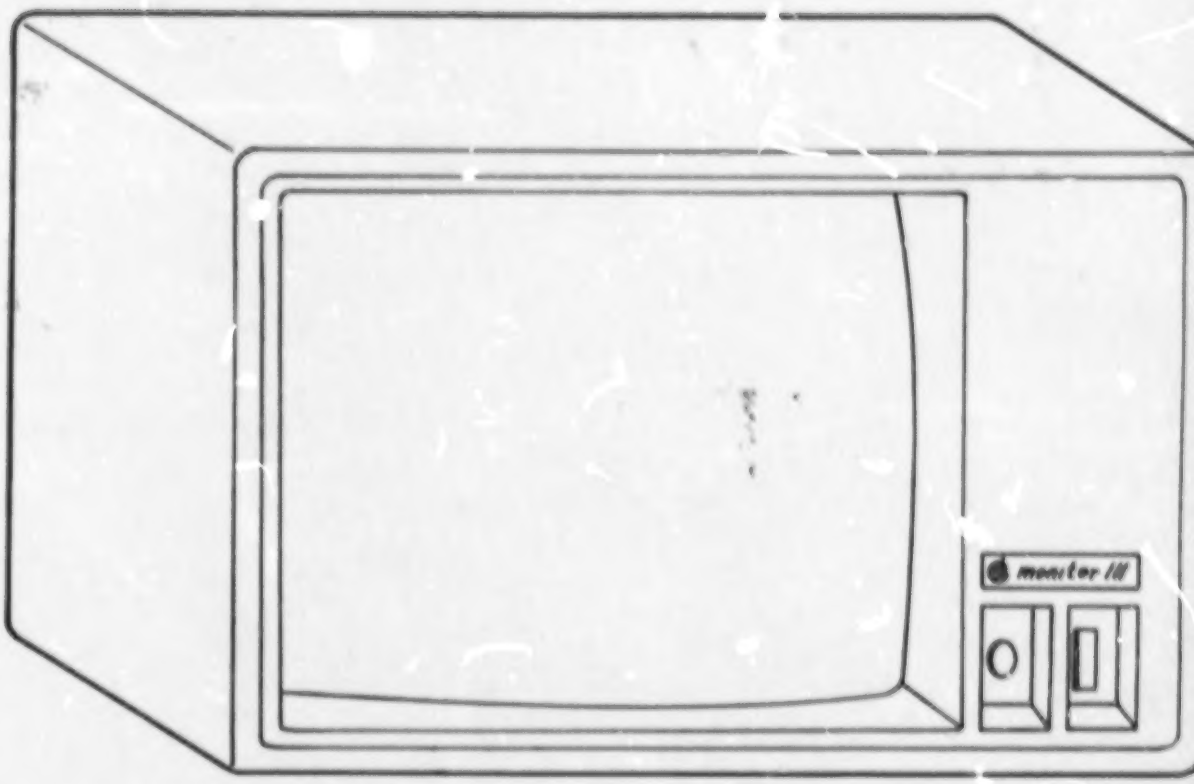
Name _____

TRAVELING APPLES



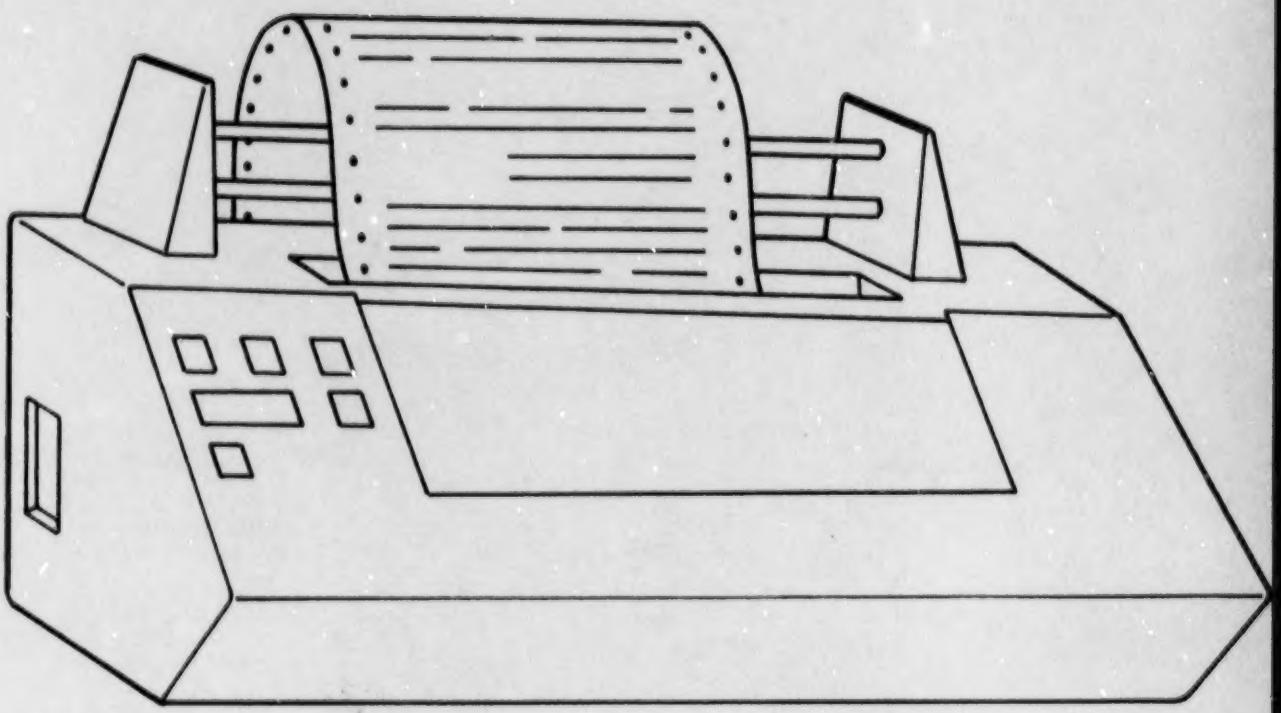
DISK DRIVE

TRAVELING APPLES



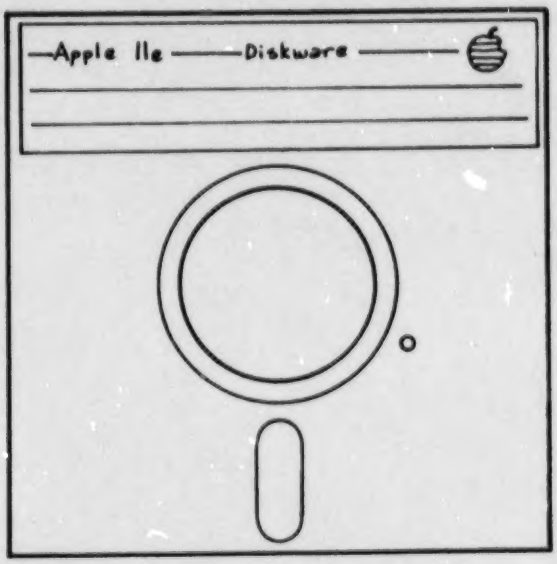
MONITOR

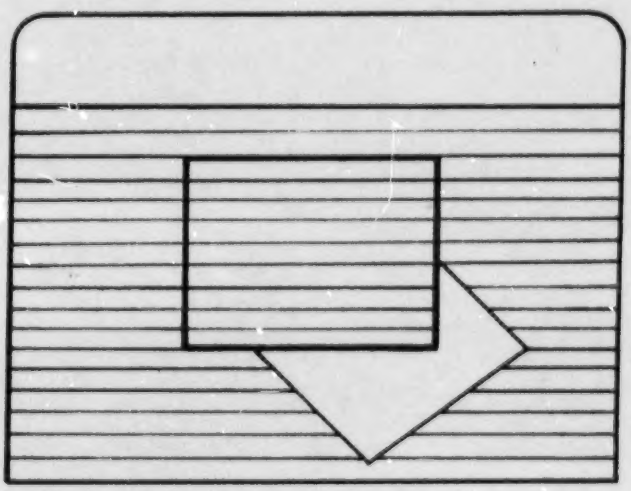
TRAVELING APPLES



PRINTER

TRAVELING APPLES





DISK

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TRAVELING APPLES

TEACHER DIRECTIONS AND SUGGESTIONS

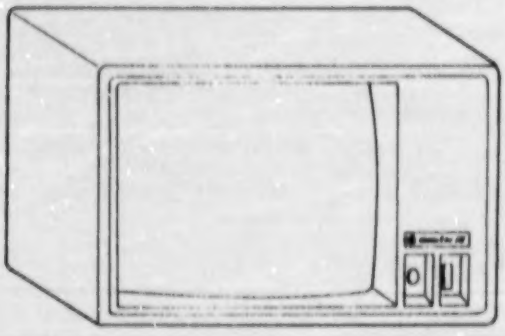
LESSON: Name the parts of a computer system.

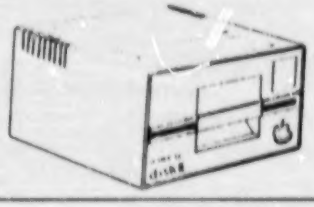
WRITING ACTIVITY: This is a monitor
This is a disk drive
This is a computer keyboard

SUGGESTION: It may be helpful to define the following:

Hardware . . . a general term for physical parts of a computer system.
Computer . . . a machine that works with numbers and instructions.
Monitor . . . a T.V.-like screen where information is displayed.
Disk Drive . . a machine that reads and saves information.

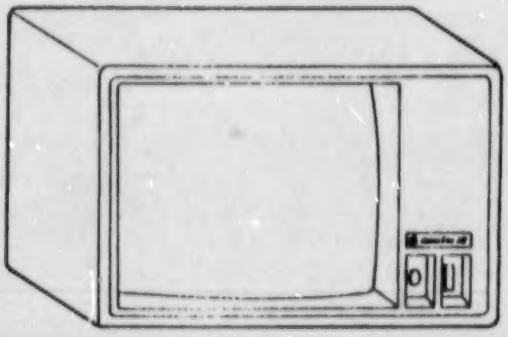
THIS IS A COMPUTER SYSTEM



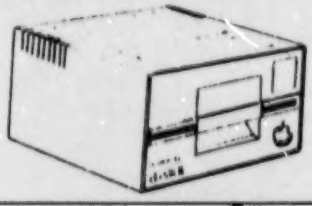


27

THIS IS A COMPUTER SYSTEM



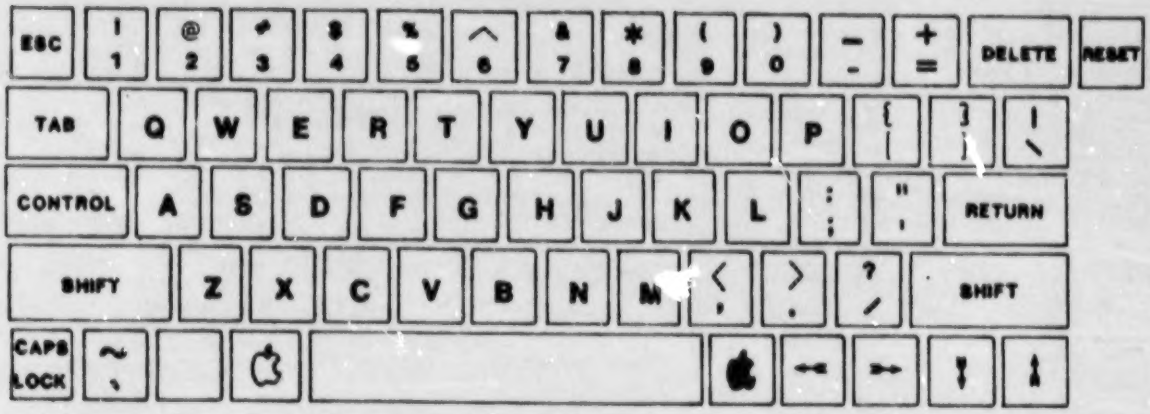
This is a monitor



This is a disk drive

This is a computer keyboard

This is the main part of the Computer System. It has a keyboard so that you can type information.



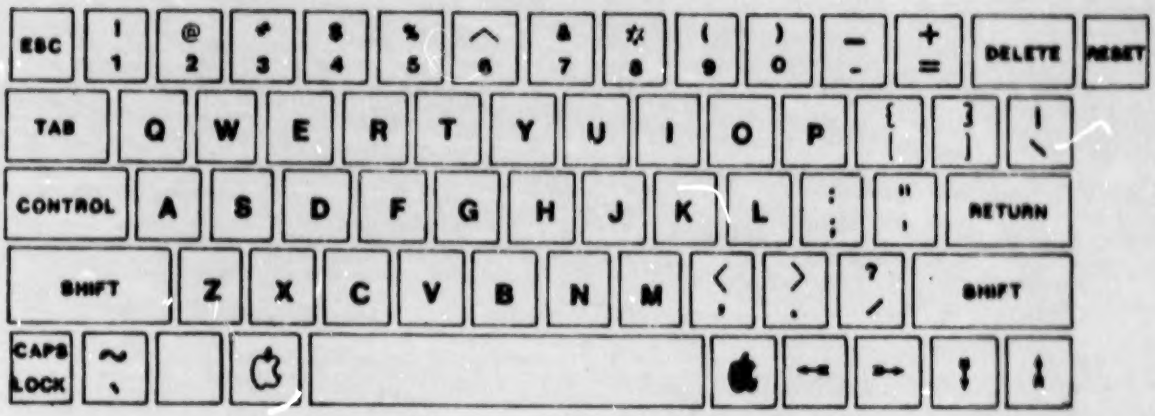
My name is

_____

_ _ _ \

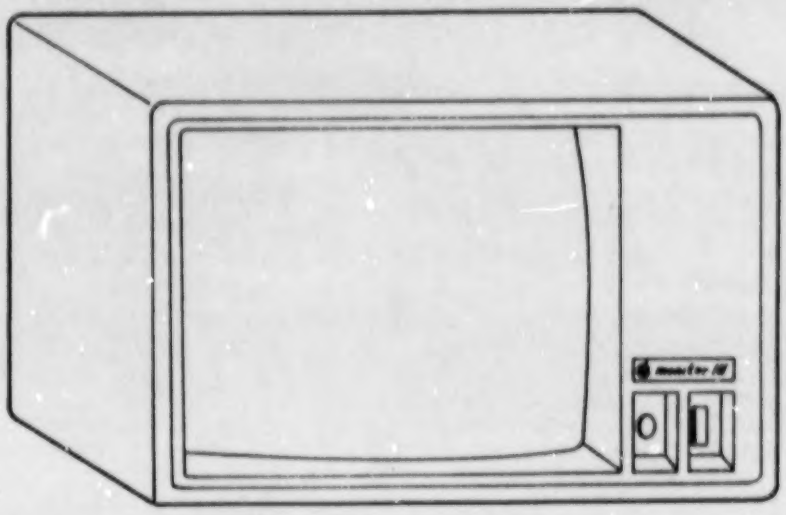
This is the main part of the Computer System. It has a keyboard so that you can type information.

TEACHER: Color the keys with the letters in their name with a red crayon. Color the keys with numerals blue.

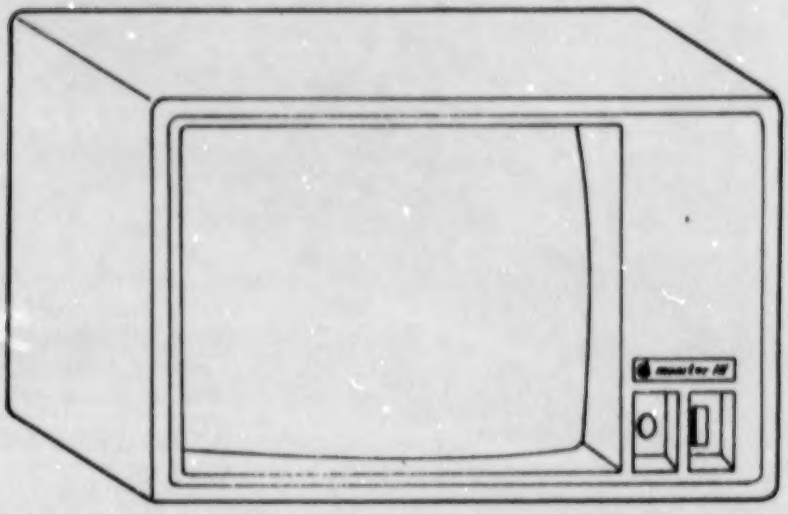


My name is

THIS IS A MONITOR



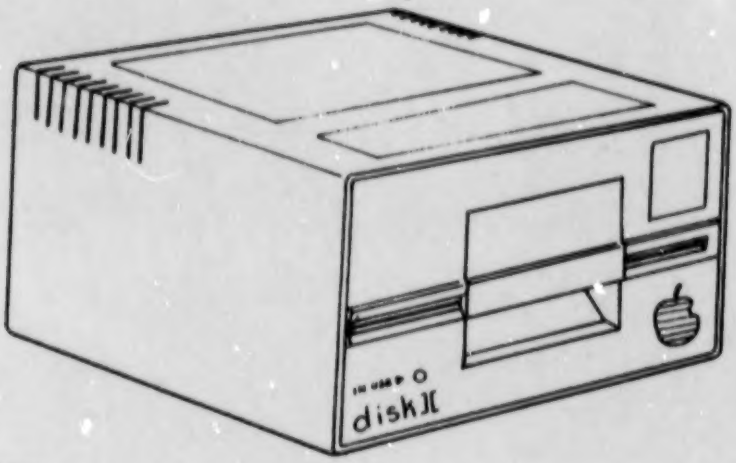
THIS IS A MONITOR



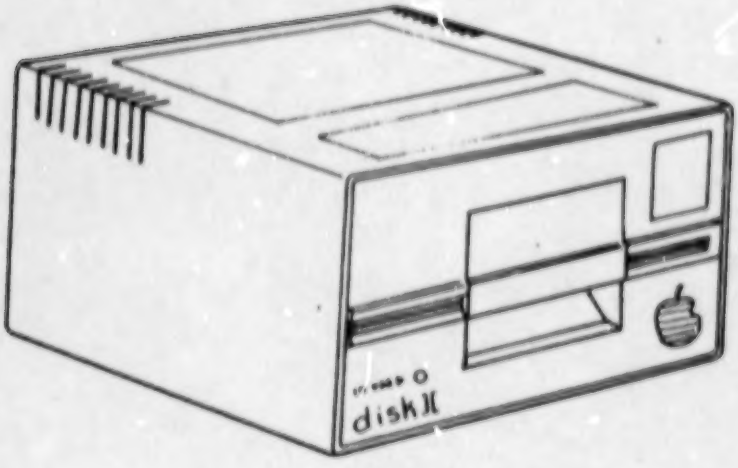
TEACHER: (Concept)
When a message is typed on the keyboard it will appear on the monitor.
(When the disk drive reads information, it may also appear on the monitor.)
Writing Activity (Is printed on the student page.)

A monitor looks like a T.V. When words are typed on the computer, they can be seen on the monitor.

THIS IS A DISK DRIVE



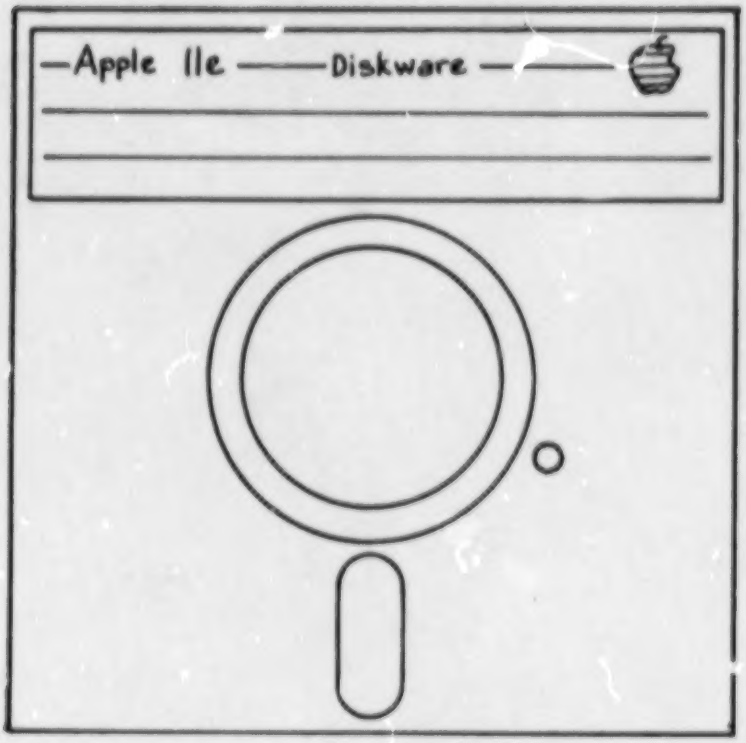
THIS IS A DISK DRIVE



TEACHER: (Concept)
The machine (disk drive) works very fast. It reads and writes information on a disk.
Activities:
Color the red "In Use" light
Color the disk drive
Write the paragraph printed on the teacher's page

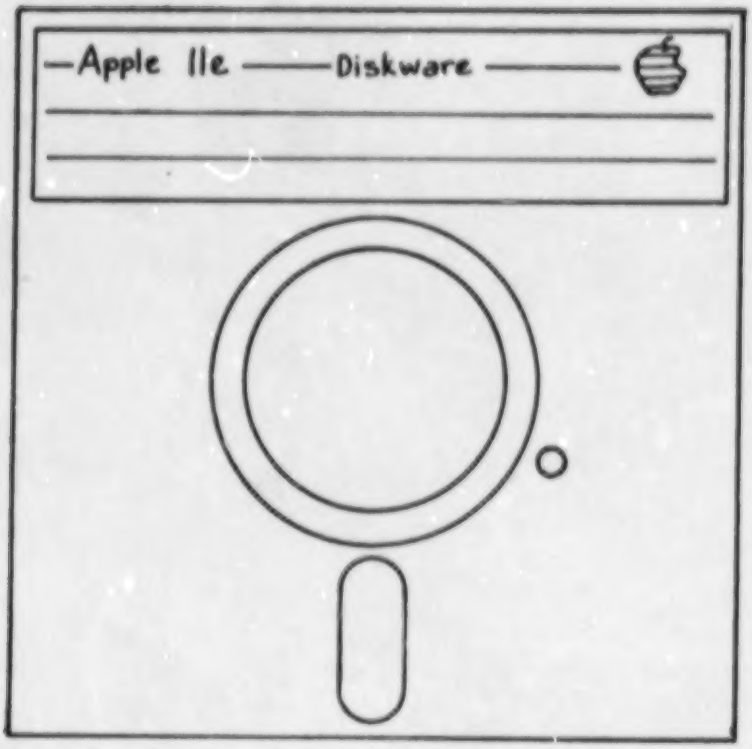
When the red light
is on, the disk drive
is working.

THIS IS A DISK



It has a label on it. The label shows what information is on the disk.

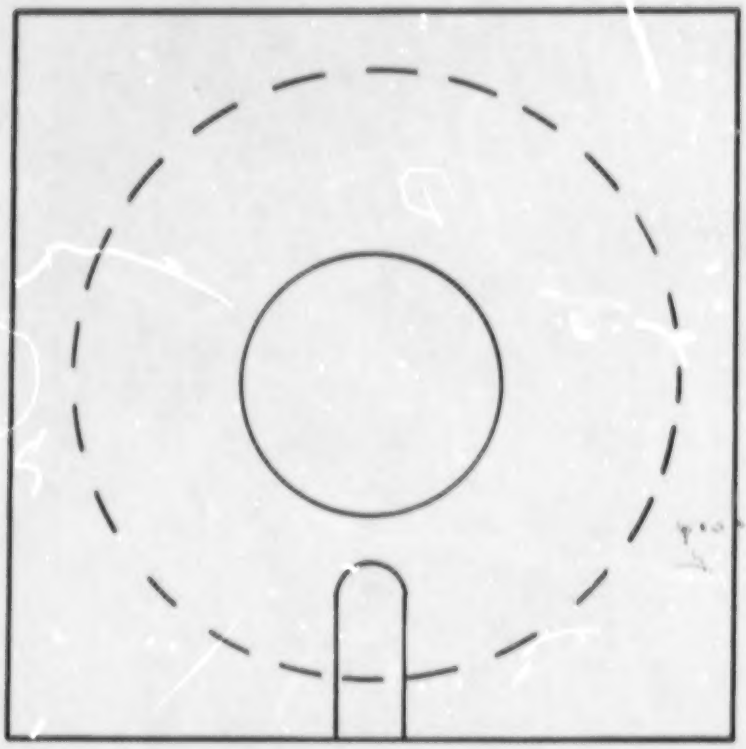
THIS IS A DISK



TEACHER: (Suggestion) Write a title on the label.

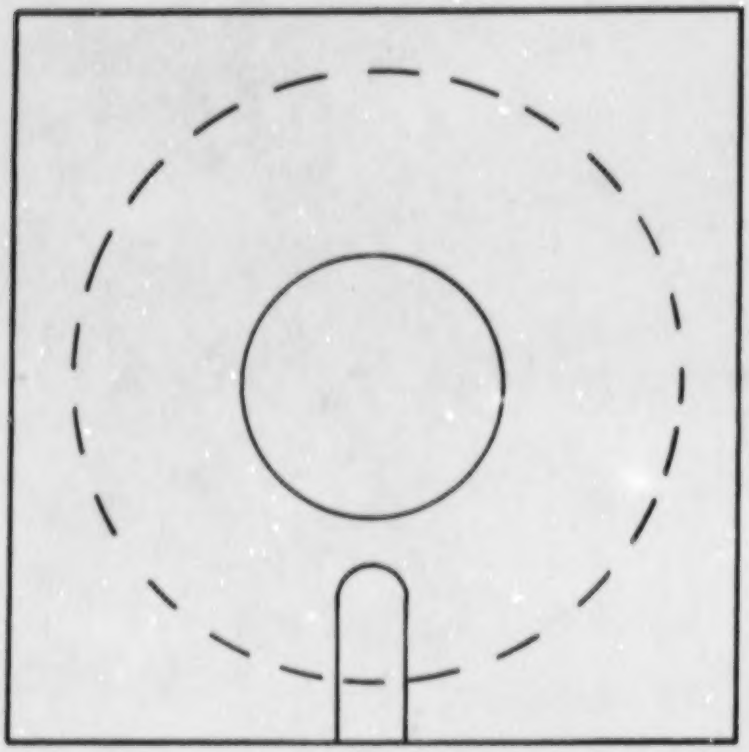
It has a label on it. The label shows what information is on the disk.

THIS IS A DISK



The disk is round. It is protected by a square cover.

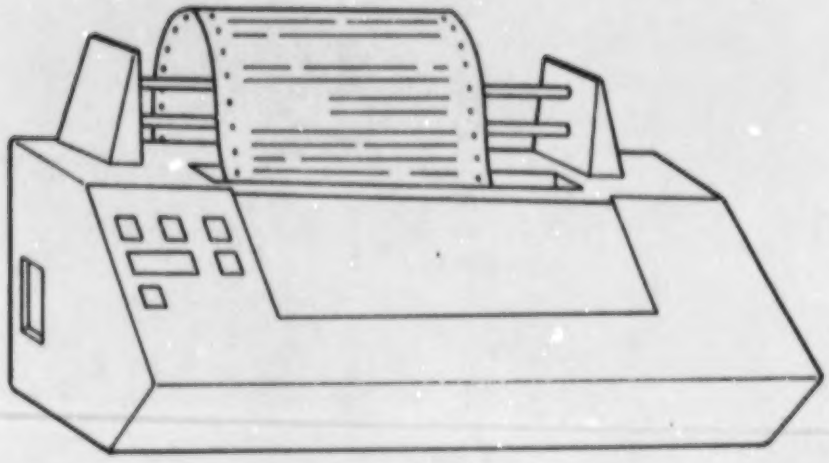
THIS IS A DISK



TEACHER: (Suggestion) Color the round part brown.

The disk is round. It is protected by a square cover.

THIS IS A PRINTER



My name is

I like

SECTION 3

SET-UP AND OPERATING INSTRUCTIONS

OPERATING INSTRUCTIONS

A disk will not be needed with most of the Traveling Apple activities. However, since you may wish to use a disk with some of the more advanced activities, instructions have been provided.

START UP WITHOUT A DISK

1. Touch the metal place under the keyboard to get rid of static electricity.
2. Check the disk drive door. It should be open.
3. Turn on the monitor.
4. Turn on the computer. The switch is located in the back on the left hand side.
5. The red light on the disk drive will light up. Press CTRL and RESET at the same time. The disk drive will shut off. The light will go off.
6. The computer is ready to use.

CLOSE DOWN WITHOUT A DISK

1. Turn off the computer.
2. Turn off the monitor.
3. Make sure the disk drive door is open.

START UP WITH A DISK

1. Touch the metal plate under the keyboard to get rid of static electricity.
2. With the disk drive door open, gently insert the disk label side up. (Your thumb should be on the label).
3. Close the disk drive door.
4. Turn on the monitor.
5. Turn on the computer. The switch is located in the back on the left hand side.
6. The red light on the disk drive will light up. The disk drive will make some purring and clicking sounds. In a moment the sounds will stop and the red light will go out. (DO NOT OPEN THE DOOR WHILE THE RED LIGHT IS ON).
7. The computer is ready to use.

CLOSE DOWN WITH A DISK

1. Open the disk drive door. Take the disk out and return it to its jacket. Leave the disk drive door open.
2. Turn off the computer.
3. Turn off the monitor.

PACKING LIST

3 - Apple IIe computers with attached disk drives
3 - Amdex Color Monitors
3 - Monitor Stands
3 - Security Cases
1 - Power Bar
3 - Disk cases with the following disks:
    a) Systems Master
    b) DOS 3.3 Sample Programs
    c) Apple Presents Apple

RECOMMENDATIONS FOR SAFETY AND SECURITY

1. Since the computers are fragile and expensive, it is crucial that they be moved only by adults at all times.

2. To prevent theft or damage, the computers should be stored in a secure alarmed room every night. Movement of the computer should be accomplished by using a school cart or locked cases, if available.

3. One electrical wall outlet will accomodate one or several computers with the use of a Power Bar (one is included with the Traveling Apples).

4. If multiple computers are being used in the same room, do not use any other electrical equipment (other than a fan, if needed) at the same time; this may exceed the electrical power load of the room and may damage the computers.

5. For proper care of computer and disks, please refer to the "Care of the Computer" and "Care of the Disk" sheets.

ENVIRONMENTAL CONSIDERATIONS

1. The computer and disks should be kept away from the chalkboard, the pencil sharpener and the sink. They are affected by dust, dirt and water.

2. The computer(s) should be positioned away from direct sunlight to avoid screen glare and eyestrain.

3. Extreme heat should be avoided. If the room temperature exceeds 90 degrees, it is recommended that a fan be used to circulate air in the classroom.

4. Because students may tend to crowd around the computer, the teacher may wish to section off an area a few feet to the sides and back of the computer as "off limits" to anyone except the operator(s).

SETTING UP THE COMPUTER FOR WORK:

1. Unfasten and open the two clips on the front of the computer carrying case.

2. Raise the lid of the case until it stands at a 90 degree angle to the table.

3. As you stand, facing the front of the computer case, slide the lid to the left. This will detach the lid from the two metal pin hinges on the back of the case. The lid can now be set in a safe place.

4. There are several different ways to arrange the pieces of the computer equipment. Two plans are presented below. Plan A is faster. Plan B takes less space. Choose the plan which best suits your needs.

PLAN A

Unfasten the strap that secures the computer and disk drives in the case. Leave the computer in the bottom of the case. Move the disk drive off the top of the computer. Place it a short distance to the right of the computer. Place the monitor stand over the disk drive. Place the monitor on the stand.

PLAN B

Unfasten the strap that secures the computer and disk drives in the case. Take the computer and disk drive out of the bottom of the case. Put the bottom of the case with the lid. Place the computer on the table. Place the disk drive a short distance away from the computer. Place the monitor stand over the computer and put the monitor on the top of the stand.

5. There are several cord connections to make. It is important to hold down the computer (or monitor) with one hand while making the connections with the other hand.

Plug one end of the thin round cable into a socket marked VIDEO IN on the back of the monitor. Plug the other end of this cable into the socket on the back of the computer with the little television above it. (This socket is the last one on the left.)

Plug one end of the heavier round cable into the three-prong plug on the back of the computer. It is near the computer's ON/OFF switch at the right side. Plug the other end into an electrical outlet (or preferably the multiple outlet power bar provided with the equipment.)

Insert the electrical cord from the monitor into an electrical outlet.

SECTION 4

ACTIVITIES WITH THE COMPUTER

STUDENT ORIENTATION FOR THE COMPUTER

The first time the computer is used in your classroom, it may be helpful to go through the following steps:

1. Discuss the components (computer, keyboard, monitor, disk drive).
2. Discuss "Care of the Computer."
3. Discuss "Care of the Disc," if appropriate.
4. Discuss your classroom rules for computer use.

   Suggestions:

   A. Create a computer area by making a 4 ft. square area with tape. This area could be "off limits" to everyone except computer operators.

   B. Decide the number of students that will be allowed at the computer at one time.

   C. Determine who will turn the computer (and monitor) on/off and who will handle or load disks.

   D. Reinforce that the computers are to be moved only by adults.

5. Walk through Operating Instructions - Start Up and Close Down Procedures

HOW TO USE THE BASIC TASK CARDS

It is recommendede that teachers examine the activity packets and review the computer set-up and operating information before using the task cards. The task cards were chosen for use with the computers. They were selected to give directed hands-on experience in the use of computers.

The cards are printed in sequential order from simple to complex activities. Cards 1-5 are a written introduction to using the cards. Cards 6-18 will provide the students with very basic computer experiences. Cards 19-40 present more difficult concepts. Cards 41-60 are the most advanced lessons in the set.

Specific Recommendations:

1. Teachers should look through the set of task cards tp become familiar with them.

2. Teachers should practice with the task cards, a few at a time, beginning with card #6. They may wish to teach a lesson from a single card or from a group of cards. In the beginning it is probably better not to introduce too many concepts or terms at any one time.

3. After the teacher feels comfortable with the task card(s), the lesson(s) could be presented to the students in a variety of ways. Possible suggestions could include: lessons for large or small groups; lessons that utilize transparencies, flip charts, puppets or blackboards; lessons on an individual basis; and/or activities that use student tutors.

4. Before entering programs into the computer it may be helpful to have the students write out the programs on paper and have them checked. This will reduce errors and reinforce computer learnings. It will take several minutes for a student to type a proofread program into the computer.

5. If students have advanced skills and have completed the Basic Tasks Cards, there is a set of Graphics and Animation task cards available from the same publisher. These cards are written in the same format. They can be purchased by individual schools. For more information about the cards, contact Larry Pierce at Educational Media Services.

INSERVICE RECOMMENDATIONS

In-Service #1

Hold approximately five weeks before the computers arrive at the school site. Should involve interested teachers.

Overview

1. Explain background of Traveling Apples

   - funds from Dolores Smith and Instructional Services
   - purpose and work of Committee (prepare introductory material for computer literacy and operation)

2. Notebooks

   - Brief description of sections (1. Implementation, 2. Activities before the computer arrives, 3. Set-up and Operating Instructions, 4. Activities with the computer)

3. Section 2 Activities
   Recommended: Xerox the first three pages of "Activities for Use Before the Computer Arrives." Make transparencies from the computer books to go along with V - "Computer Hardware"

   - Demonstrate how a lesson could be planned from these materials for any grade level.

In-Service #2
Hold the day the computers arrive at the school site.

Overview

Recommended: Make a transparency of "Setting Up the Computer for Work."

1. Discuss "Safety and Security" and "Environmental Considerations."

2. Demonstrate taking the computers out of the case. (#1-3 of transparency).

3. Discuss Plans A & B (#4of transparency). A is faster; B takes less space.

4. Have the teacher(s) follow the directions on making the card connections (#5 of transparency).

5. Go over "Operating Instructions." Highlight "Care of the Computer" and "Care of the Disk."

6. Go over "Student Orientation for the Computer."

7. Go over "How to Use the Basic Task Cards."

8. As time permits, let the teachers use the task cards and the computers.